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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/574,132

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Wilhelmus Christianus Maria Lohbeck

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10/27/2008

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EXAMINER

KEE, FANNIE C

ART UNIT

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3679

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/574,132	<b>Applicant(s)</b> LOHBECK, WILHELMUS CHRISTIANUS MARIA	
	<b>Examiner</b> Fannie Kee	<b>Art Unit</b> 3679	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. Applicant has not stated that claim 16 was also canceled via Applicant's claim amendments. Examiner has interpreted that Applicant has canceled both claims 15 and 16 in the preliminary amendment to the claims filed on 3/30/06 and that only claims 1-14 are pending in the instant application.

### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the annular space formed between the inner tubular element and the outer tubular element upon radial expansion of the inner tubular element and the space being filled with a fluidic compound must be shown or the features canceled from claim 9. No new matter should be entered.

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the space being filled with a hardenable fluidic compound must be shown or the feature canceled from claim 10. No new matter should be entered.

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the flexible layer of sealing material arranged around the outer tubular element must be shown or the feature canceled from claim 11. No new matter should be entered.

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5. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Specification*

6. The abstract of the disclosure is objected to because of a minor grammatical error, i.e., add the word --a-- between the words “than” and “radially outward movement” in line 7.

Correction is required. See MPEP § 608.01(b).

7. The disclosure is objected to because of the following informalities:

a. Page 4, line 29 – add the word --an-- after the words “referred to as”.

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- b. Page 6, line 4 – add the word --a-- before the words “longitudinal direction”.
- c. Page 6, line 8 – replace “portions 28, 29” with --portions 26, 27--.
- d. Page 6, line 32 - add the word --the-- before the word “hoop”.
- e. Page 6, line 33 - add the word --the-- before the word “case”.
- f. Page 7, line 1 - add the word --the-- before the word “case”.
- g. Page 7, line 5 – add the word --a-- before the words “longitudinal direction”.
- h. Page 7, line 11 – replace “skew” with --skewed--.
- i. Page 7, line 16 - add the word --the-- before the word “hoop”.
- j. Page 7, line 23 - add the word --the-- before the word “hoop”.
- k. Page 7, line 27 – add the word --a-- before the words “longitudinal direction”.
- l. Page 7, line 30 – replace “end member 32” with --end member 33--.
- m. Page 7, line 32 – replace “portions 27, 28” with --portions 26, 27--.
- n. Page 7, line 6 - add the word --the-- before the word “surface”.

Correction is required.

### ***Claim Objections***

- 8. Claim 1 is objected to because of the following informalities:
  - o. Line 3 – add the word --a-- before the words "first portion".
  - p. Line 9 – replace the word "portion" with --portions--.
  - q. Line 15 – replace the word "said" before the words “first portion” with --the-- to maintain consistency in the claim.

Correction is required.

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9. Claim 5 is objected to because of the following informalities: replace the word “claims” with --claim-- in line 1.

Correction is required.

10. Claim 8 is objected to because of the following informalities: delete the word “the” in line 2.

Correction is required.

11. Claim 14 is objected to because of the following informalities:

r. Line 1 - delete the word “each” and add the words --at least one-- before the word ”elongate”.

s. Line 2 - replace the word “members” with --member--.

Correction is required.

### ***Claim Rejections - 35 USC § 112***

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. Claims 1-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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Claim 1 recites “the first portion and the second portion being restrained to the tubular element in a manner that the distance changes as a result of radial expansion of the tubular element”. What does Applicant mean by “in a manner”? What type of manner is Applicant referring to? It is not clear how the first and second portions are restrained to the tubular element. Examiner is interpreting that as long as the first and second portions are restrained to the tubular element such that the distance between the first and second portions can change as a result of radial expansion, the claim limitation has been met.

Claim 4 recites “wherein the first portion and the second portion of the outer structure are welded to the tubular element at respective locations axially spaced from each other”. As welding would permanently affix the first and second portions to the tubular element, how can the distance between the first and second portions change as a result of radial expansion of the tubular element as claimed in claim 1? Examiner is interpreting that the welds provide only a semi-permanent attachment and not a permanent attachment which would allow the distance between the first and second portions to change as the tubular element is radially expanded.

Claim 14 recites the limitation "each said elongate members" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 102***

14. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

15. Claims 1-3, 5, 8, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Bosma et al WIPO International Application No. WO 03/008760 A1.

With regard to claim 1, and as seen in Figures 3A and 3B, Bosma et al disclose an assembly for use in a wellbore formed in an earth formation, comprising:

an expandable tubular element (6) and an outer structure (64, 60, 17) having first portion (64) and a second portion (17) arranged at a distance from each other;

the first portion and the second portion being restrained to the tubular element in a manner that the distance changes as a result of radial expansion of the tubular element;

the outer structure further having a third portion (60) arranged to move radially outward upon the change in distance between the first and second portion;

wherein the radially outward movement of the third portion is larger than the radially outward movement of the tubular element as a result of radial expansion of the tubular element;

wherein the tubular element is susceptible of axial shortening upon radial expansion thereof; and



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wherein said first portion and the second portion of the outer structure are connected to the tubular element at respective locations axially spaced from each other.

With regard to claim 2, and as seen in Figures 3A and 3B, Bosma et al disclose the third portion (60) being arranged to move radially outward as a result of a decrease in distance between the first portion (64) and the second portion (17).

With regard to claim 3, and as seen in Figures 3A and 3B, Bosma et al disclose the third portion (60) being arranged to move radially outward by virtue of radially outward bending of the third portion.

With regard to claim 5, and as seen in Figures 3A and 3B, Bosma et al disclose the tubular element (6) being an inner tubular element and the outer structure (64, 60, 17) being an outer expandable tubular element arranged around the inner tubular element, and wherein the outer tubular element, when unrestrained from the inner tubular element, is susceptible to less axial shortening as a result of radial expansion than the inner tubular element.

With regard to claim 8, and as seen in Figures 3A and 3B, Bosma et al disclose the first portion (64) and the second portion (17) being the respective end portions of the outer tubular element.

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With regard to claim 12, and as seen in Figures 3A and 3B, Bosma et al disclose the outer structure including at least one elongate member (60) extending in the axial direction of the tubular element (the axial direction being defined as the direction of flow entering the system).

***Claim Rejections - 35 USC § 103***

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 4, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bosma et al.

With regard to claim 4, Bosma et al disclose the claimed invention but do not disclose that the first portion and the second portion of the outer structure are welded to the tubular element at respective locations axially spaced from each other. It is well known in the art to use welding as a method to either permanently or semi-permanently attach one element to another element to ensure that the two elements are secured together against accidental dislodging.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have welded the first and second portions of the outer structure to the tubular element at respective locations axially spaced from each other because it is well known in the art to use welding as a method to either permanently or semi-permanently attach one element to

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another element to ensure that the two elements are secured together against accidental dislodging.

With regard to claim 13, Bosma et al disclose the claimed invention but do not disclose that the outer structure includes a plurality of said elongate members regularly spaced along the circumference of the tubular element.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the outer structure include a plurality of said elongate members regularly spaced along the circumference of the tubular element instead of just one elongate member so that in the event of failure of one member, the other members are still there to bolster the provide a secure wall for the tubular element.

With regard to claim 14, Bosma et al disclose the claimed invention but do not disclose each said elongate member being a metal bar.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have formed each said elongate member as a metal bar because a change in the shape of a prior art device is a design consideration within the level of skill of one skilled in the art. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

18. Claims 6, 7, and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bosma et al in view of Gill et al WIPO International Application No. WO 96/22452.

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With regard to claim 6, Bosma et al disclose the claimed invention but do not disclose that the outer tubular element is provided with a plurality of openings in the wall thereof, said openings overlapping each other in the axial direction. Gill et al teach that the wall of the outer tubular element can have a plurality of openings (12) which overlap each other in the axial direction (as seen in Figure 1 - the axial direction being defined as the direction of flow entering the system) to allow for a larger radial expansion of that wall (page 3, lines 25-26).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the wall of the outer tubular element with a plurality of openings which overlap each other in the axial direction to allow for a larger radial expansion of that wall as taught by Gill et al.

With regard to claim 7, Bosma et al disclose the claimed invention but do not disclose that said openings are slots provided in the wall of the outer expandable tubular element, the slots extending substantially in the axial direction. Gill et al teach that the wall of the outer tubular element can have a plurality of openings (12) which are slots and which extend substantially in the axial direction (the axial direction being defined as the direction of flow entering the system) to allow for a larger radial expansion of that wall (page 3, lines 25-26).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the openings provided in the wall of the outer tubular element be slots which extend substantially in the axial direction to allow for a larger radial expansion of that wall as taught by Gill et al.

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With regard to claim 9, Bosma et al disclose an annular space being formed between the inner tubular element and the outer element upon radial expansion of the inner tubular element but do not disclose that the annular space is filled with a fluidic compound. Gill et al teach that the annular space between the inner tubular element and the outer element can be filled with a fluidic compound to fill and close the openings to increase the compressive strength (page 3, lines 13-18).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have filled the annular space with a fluidic compound to fill and close the openings to increase the compressive strength as taught by Gill et al.

With regard to claim 10, Bosma et al disclose the claimed invention but do not disclose that the space is filled with a hardenable fluidic compound. Gill et al teach that the space can be filled with a hardenable fluidic compound to increase the compressive strength (page 3, lines 13-18).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have filled the annular space with a hardenable fluidic compound to fill and close the openings to increase the compressive strength as taught by Gill et al.

With regard to claim 11, Bosma et al in view of Gill et al disclose a flexible layer of sealing material (10, 12, 14) being arranged around the outer tubular element.

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***Conclusion***

19. Lohbeck '012, Gill et al '011, Worrall et al, Bosma et al '282, Lohbeck '493 and Lohbeck '361 are being cited to show other examples of assemblies with an expandable tubular element and an outer structure.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fannie Kee whose telephone number is (571) 272-1820. The examiner can normally be reached on 8:30 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aaron M Dunwoody/  
Primary Examiner, Art Unit 3679

/F. K./  
Examiner, Art Unit 3679

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October 26, 2008